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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/868,766	06/21/2001	Masaru Watanabe	MOR-C077	6429

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EXAMINER

VALENCIA, DANIEL E

ART UNIT PAPER NUMBER

2874

DATE MAILED: 03/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/868,766

Applicant(s)

WATANABE ET AL.

Examiner

Daniel E Valencia

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11-16 and 20-22 is/are allowed.
- 6) ☒ Claim(s) 17-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

(2003)

Applicant's communication filed on February 7[^] has been carefully studied by the Examiner. The arguments advanced therein, considered together with the amendments made to the claims, are persuasive and the rejections based upon prior art made of record in the previous Office Action are withdrawn. Many of applicant's claims are now allowable. In view of further search, however, and the consequent discovery of previously uncited prior art document, a new rejection is applied to certain of the pending claims. This action is **not** made final.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 17-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Takeuchi U.S. Patent No. 5,841,926. Refer to the appropriate drawings or parts of the specification. Takeuchi discloses optical fibers for optical attenuation with all the limitations of the abovementioned claims. Regarding claim 17, Takeuchi discloses an optical attenuator (fig 7-11) in the form of a single mode optical fiber (col. 6, 25-26) lines for receiving an optical signal, attenuating the optical signal and outputting the attenuated optical signal, said optical attenuator comprising a

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core (1) containing a dopant (col. 7, lines 55-57) which attenuates the optical signal more when the wavelength is shorter, said dopant being contained only in a dopant area limited to a centermost portion of said core (col. 7, lines 47-49), said core comprising said centermost portion and a peripheral portion contiguous with said centermost portion (fig 7) and free of dopant, said core having a refractive index at said centermost portion greater than that of said peripheral portion (see profile in fig 7a), said optical fiber having a mode field for single mode transmission (col. 8, lines 8-11) of the optical signal exclusive of said centermost and peripheral portions of said core. Takeuchi's disclosure further shows that the refractive index profile is a square wave (fig 7a) and the cladding (2) surrounds that core and does not contain dopant (col. 7, line 64).

Allowable Subject Matter

Claims 11-16 and 20-22 are allowed.

The following is an examiner's statement of reasons for allowance: As to independent claims 14 and 20, the prior art alone or in combination fails to disclose or render obvious an optical attenuator in the form of a single mode fiber for receiving an optical signal, attenuating the optical signal and outputting the attenuated optical signal, said optical attenuator comprising a core containing a dopant which attenuates the optical signal more when the wavelength is shorter or longer, said dopant being contained only in a dopant area limited to a peripheral portion of said core, said core comprising said centermost portion free of dopant and peripheral portion contiguous with said centermost portion, said core having a refractive index at said centermost portion greater than that of said peripheral portion, said optical fiber having a mode

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field for single mode transmission of the optical signal exclusive of said centermost and peripheral portions of said core. For example, Takeuchi discloses an attenuator in which the dopant is limited to the center of the core, but the reference does not imply or suggest the dopant in the periphery of the core.

As to independent claim 11, the prior art alone or in combination fails to disclose or render obvious an optical attenuator in the form of a single mode optical fiber lines for receiving an optical signal, attenuating the optical signal and outputting the attenuated optical signal, said optical attenuator comprising a core containing a dopant which attenuates the optical signal more when the wavelength is *longer*, said dopant being contained only in a dopant area limited to a centermost portion of said core, said core comprising said centermost portion and a peripheral portion contiguous with said centermost portion and free of dopant, said core having a refractive index at said centermost portion greater than that of said peripheral portion, said optical fiber having a mode field for single mode transmission of the optical signal exclusive of said centermost and peripheral portions of said core. Takeuchi discloses an attenuator with all the above limitations; however, the reference teaches attenuation of wavelengths that are shorter, not longer.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Chenard U.S. Patent No. 6,498,888 discloses a high attenuation fiber with cladding

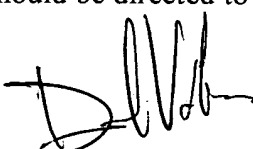
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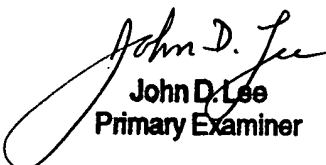
mode suppression for an all fiber optical attenuator, wherein the core of the fiber can be doped in the centermost region or in the peripheral region.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel E Valencia whose telephone number is (703)-305-4399. The examiner can normally be reached on Monday-Friday 9:30-6:00.

The fax phone numbers for the organization where this application or proceeding is assigned are (703)-308-7724 for regular communications and (703)-308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-0956.


dv
March 6, 2003


John D. Lee
Primary Examiner